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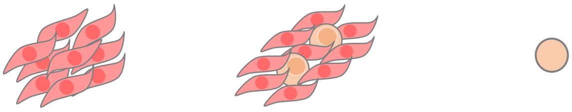
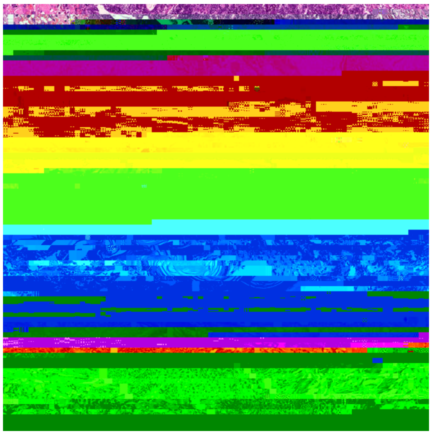
[25,26]. DNA [24,27–29], P C. G 150





D 2). F Prickle1, DNA
K R- P C (50-70%)
MEF (>90%),
▲ 2 E C (<10%), 2 -[48–51].
F 13
MEF -
ICR, 11
(P /A, Peg3, Gnas, Commd1-Zrsr1, Mcts2-H13, Kcqn1-Kcnq1ot1,

Mest/Peg1, Plagl1/Zac1, Grb10, Igf2r Impact)
(Igf2-H19 Dlk1-Dio3) (F . 2A; F . 2B;
D 2). -
▲ 2 E C, 2 -[52,53].
(>75 % <25 %
) K R- P C.
F,
ICR K R- P C (F . 2A;

(F . 4E; F . 4C). Q
(Dlk1-Dio3 Igf2-H19) -
ICR (F . 4B; F . 4E).
Igf2-H19 -
(F . 4B; F . 4E, F),
H19 (F . 4C). A

Dlk1-Dio3 4 5
P C.
(F . 4B). W M FB 1 P C,
Dlk1-Dio3 ICR Meg3 -
M FB 5 Meg3 (
F . 5A). C Meg3

Fig. 2 | Hypomethylation defects in KSR-iPSCs. A M [illegible] Peg3, Dlk1-Dio3, Igf2-H19 [illegible] P [illegible] /A ICR [illegible] MEF [illegible] (F K R1-6) [illegible] (M K R1-6) P C [illegible] 2 E C ; E [illegible] D [illegible] C G [illegible] ([illegible] C G [illegible] - Peg3: n = 24; Dlk1-Dio3: n = 27; Igf2-H19: n = 16; P [illegible] /A : n

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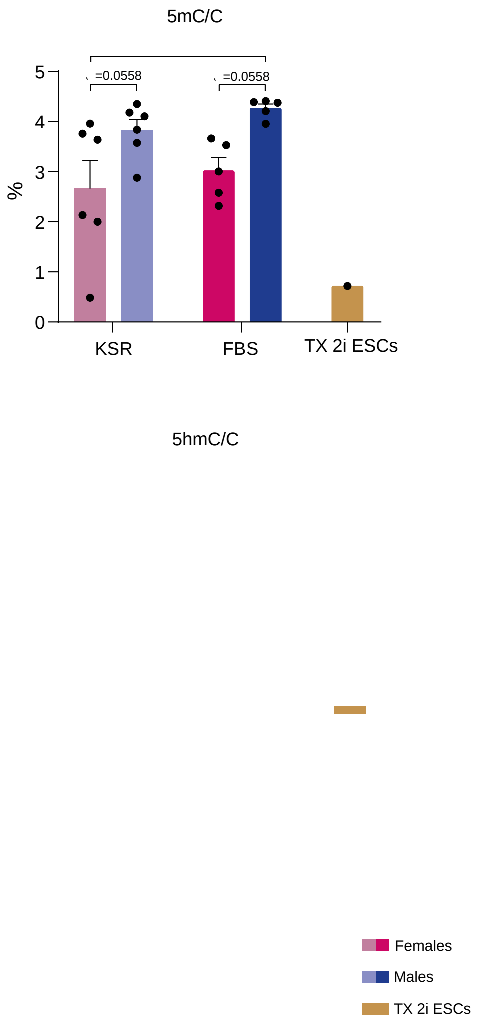
[illegible] Dlk1-Dio3 [illegible] F . 5A,B; [illegible] D 2). [illegible] Meg3 [illegible] 13 [illegible] (F . 5A) [illegible] K R [illegible] FB [illegible] DNA [illegible] Dlk1-Dio3 ICR ([illegible] F . 5B). Meg3 [illegible] Dlk1-Dio3 ICR ([illegible]

K R- FB - P C . F 5- (5 C) L C (LC-M /M) K R- FB - P C ▲ 2 E C . LC-M - P C 5 C P C (F . 5B). E C / P C 5 C [54,55,57]. Q 5 C K R FB P C (F . 5B). A K R- FB - P C 5 C ▲ 2 E C (F . 5B), 2 [50,51] - P C DNA

E C [58]. W A (IAP), L R (L R). II (ER)[59] L I N E 1 (LINE1), LINE1-A (L1-A) LINE1- (L1-), -L R [60]. B - - [58], (F . 5C). IAP DNA P C , FB . L1-A K R FB - P C (F . 5C). DNA ▲ 2 E C (F . 5C) [58]. I - , L1- 6 39999961( )1.2000000416(15.370000076(-4.1999999( ))15.39999961(325..5( )19( )13.37999992



[illegible] (. ., P /A) [illegible] P C [illegible] FB [illegible] FB [illegible] (F .5A). [illegible] FB [illegible] O [illegible] K R- [illegible] R [illegible] H 1 [illegible] EA1 (−/ +), [illegible]

K R FB 1:1
K R. FB ,
FB K R.
-
Igf2-H19
Dlk1-Dio3 4 6 K R/FB - P C (F . 7A). H -
(Mcts2-H13, Peg3, Igf2-H19
Commd1-Zrsr1) (F . 7A),
(F . 9A). D -
K R/FB
K R- P C .
O C FB -
. FB + C.
Dlk1-Dio3 ICR[38],
Peg3, P /A Commd1-Zrsr1

Prickle1,
5 C
DNA (
F . 7F). 5 C
Xist,
(F . 6B). 5 C
(F . 7E)

[illegible] P C . F [illegible] P C [illegible]

[illegible] 10% [illegible] L [illegible] DM2500 [illegible] L [illegible] MC170 HD [illegible].

[illegible] fl [illegible] s [illegible] (F)

C [illegible]

[illegible] 8 [illegible] R [illegible] 2 [illegible] ID [illegible] M [illegible] I [illegible] (MI). [illegible] MI [illegible] “[illegible]”. R [illegible] G [illegible] 0.5.0 ([illegible]), C [illegible] 1.15, [illegible]). [illegible] A [illegible]

2. Mandai, M. et al. iPSC-derived retina transplants improve vision in rd1 end-stage retinal-degeneration mice. *S C R*. **8**, 69–83 (2017).
3. Shi, Y., Inoue, H., Wu, J. C. & Yamanaka, S. Induced pluripotent stem cell technology: a decade of progress. *Na. R . D D c* . **16**, 115–130 (2017).
4. Buganim, Y., Faddah, D. A. & Jaenisch, R. Mechanisms and models of somatic cell reprogramming. *Na. R . G* . **14**, 427–439 (2013).
5. Schiebinger, G. et al. Optimal-transport analysis of single-. *C G E . I fi*

49. Habibi, E. et al. Whole-genome bisulfite sequencing of two distinct interconvertible dna methylomes of mouse embryonic stem cells. *C S C* **13**, 360–369 (2013).